

Remarks

The Applicants note with appreciation the continued indication that Claims 8, 10 – 14, 15 – 18, 22 and 24 would be allowable if rewritten into independent form. The Applicants respectfully request that further treatment of those claims be held in abeyance pending allowance of the remaining claims.

The Applicants also note with appreciation the withdrawal of three (3) of the prior rejections under 35 USC §112.

The Applicants acknowledge the new rejection under 35 USC §112, second paragraph with respect to the indefiniteness of Claims 9 and 15. The Applicants provide the following clarifying comments concerning both of Claims 9 and 15. With respect to Claim 9, the pKa is described in detail in the Applicants' Specification in paragraph [0023]. This value is an intrinsic value for the compound. Thus, it does not depend on a reaction solvent.

With respect to Claim 15, the term "hydrous" is described in the Applicants' Specification in paragraph [0018] and can be calculated by the equation in that paragraph. Thus, the term simply means a water content and does not depend on the variation of alcohol. Withdrawal of the rejection of Claims 9 and 15 is respectfully requested.

The Applicants have amended Claim 1 to include the subject matter of all of Claims 3 – 6. Claims 3 – 6 have accordingly been cancelled.

Claims 1, 3, 5 – 6, 21 and 23 stand rejected under 35 USC §103 over Wu. The Applicants respectfully submit that the rejection is now moot with respect to cancelled Claims 3 and 5 – 6. Also, the Applicants respectfully submit that the rejection is now moot with respect to Claim 1 in view of the incorporation of the subject matter of Claim 4 into Claim 1. Withdrawal of the rejection with respect to Claim 1 is accordingly respectfully requested.

In any event, the Applicants respectfully submit that Wu is inapplicable to Claims 21 – 23. Reasons are set forth below. The Applicants' process that results in the composition of Claims 21 and 23 has an excellent reaction yield with a water content of 15 wt% or less of an organic solvent. It is unnecessary in the Applicants' process to add a third ingredient, e.g., an acid or a base, etc. The Applicants invite the Examiner's attention to paragraph [0016] in the Specification:

Furthermore, considering the reaction yield, it is preferred that the water content of the organic solvent is lower, and at a water content of 15 wt% or less, a virtually satisfactory result can be obtained. For this reason, it is necessary that the water content of the organic solvent is 15 wt% or less. If the water content is more than 15 wt%, there arises a problem, since the reaction yield of the oxycarbonyl piperazine derivative obtained by oxycarbonylating the piperazine derivative is remarkably lowered.

This is important as illustrated below by the examples of a comparison of water contents from the Applicants' process to another process.

	Water Content	Reaction Yield
Example 3	0 wt%	95.1 %
Comparative Example 1	21 wt%	59.6 %

Other Comparative Examples demonstrate a smaller reaction yield as the water content increases.

This is sharply contrasted to Wu, which does not disclose any reaction in which the water content of an organic alcohol solvent is 15 wt% or less. Moreover, Wu does not provide teachings that the reaction yield decreases as the water content increases.

The rejection in the March 10, 2008 Office Action states that the water content in "Example 2 is 15.8% (it states 1200 mL of methanol and 400 mL of water)." The Applicants believe that this is

in error. That water content would not be 15.8%. Instead, it would be 29.6% because the water content is calculated as follows,


$$[400(\text{mL}) \times 1.00(\text{g/mL})] / [1200(\text{mL}) \times 0.791(\text{g/mL}) + 400(\text{mL}) \times 1.00(\text{g/mL})] = 0.296$$

As a result, it is clear that the Applicants' process is completely different and inherently results in a composition that is both completely different from Wu and not suggested by Wu. Withdrawal of the rejection with respect to Claims 21 and 23 is respectfully requested.

Claims 1 and 3 – 6 stand rejected under 35 USC §103 over Kim. The Applicants respectfully submit that the rejection is now moot with respect to cancelled Claims 3 – 6. The Applicants respectfully submit that Kim is nonetheless inapplicable to Claim 1. Kim is not prior art. Kim was published in 2003. The Applicants' earliest priority date is September 5, 2002 and the Applicants already submitted a verified English translation of that priority document. Withdrawal of the rejection is respectfully requested.

In light of the foregoing, the Applicants respectfully submit that the entire application is now in condition for allowance which is respectfully requested.

Respectfully submitted,



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